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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,315	10/25/2001	Seong Yong Kim	8111-009-999	2983
20583	7590	09/08/2004	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			ELMORE, REBA I	
			ART UNIT	PAPER NUMBER
			2187	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/002,315	KIM, SEONG YONG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Reba I. Elmore	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/23/02</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

1. Claims 1-11 are presented for examination.

### *Specification*

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Korea on October 25, 2001. It is noted, however, that applicant has not filed a certified copy of the 2000-63039 application as required by 35 U.S.C. 119(b).
3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The oath or declaration filed with the application October 25, 2001 shows two inventors:

Sung Hun Park  
Seong Yong Kim

neither of which signed the original oath.

The oath or declaration filed February 12, 2002 shows only Seong Yong Kim. This declaration has been signed on January 28, 2002.

It is not clear which oath or declaration is to be the correct oath or declaration. To remove inventor Sung Hun Park from the application, see MPEP 201.03(d).

4. The disclosure is objected to because of the following informalities:  
acronyms must be defined at their first usage, for example:

SCRAM – page 1, line 8;

CD-ROM – page 5, lines 20; and,

claim 2 must end in a period.

Appropriate correction is required.

5. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter. The following deficiencies are noted in the specification:

means language has been used in the summary of the invention; this style of language is only appropriate for the actual claims;

‘a data seek time is removed by converting data position information in the HDD into a corresponding memory address so that a data access time is minimized to the order of several nano-seconds.’ does not appear to have any relationship with the rest of the specification;

‘As a result, Access speed to auxiliary memory’;

‘rest of maintains’;

‘and the like’;

‘although a change in the system and requirements of the capacity increase in geometric progression, the present invention has the ability to easily address the change and the requirements’;

‘... is use’; and

‘an astronomical capacity’.

The detailed language examples given above have obscured the description of what the applicant considers their present invention.

6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***35 USC 112, 1<sup>st</sup> paragraph***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The language directed to 'converting an external bus into an internal bus' in claim 1 is not explained or supported in the specification. Additionally, the language 'tree hierarchical configuration' appears in the claims. This same language appears in the specification. This language is not further explained in either the specification or the claims. It is not clear as to whether the 'tree hierarchical configuration' refers to a type of memory configuration or somehow relates to bus signals. It is not possible from either the specification or the claims to determine the scope of this language or to determine the metes and bounds of the claims.

***35 USC 112, 2<sup>nd</sup> paragraph***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following claim language is not clear or distinct:

it is not clear as to what is meant by converting an external bus into an internal bus;

it is not clear as to whether the memory module is part of the internal bus or connected to the internal bus;

the language 'means for processing writing data' is unclear in meaning;

it is unclear as to how a SCSI bus is also a converting means, what is being converted and how is the converting being accomplished;

it is unclear as to what type of a configuration for the memory the 'tree hierarchical configuration' represents;

it is unclear as to how a tree hierarchical configuration 'compensates' signals at an intermediate stage, what does the intermediate stage represent and what is a 'lower hierarchy';

the compensation claimed in claim 9 is unclear;

it is unclear as to what elements are 'remaining in a low power mode'; and,

it is unclear as to what is being claimed in claim 11.

This language is not defined in either the actual claim language or the specification. It is not possible from either the specification or the claims to determine the scope of this language or to determine the metes and bounds of the claims.

Due to the ambiguities and confusion in claims 1-11 as cited above, no art has been applied thereto, see *In re Steele*, 49 CCPA 1295, 305 F. 2d 859, 134 USPQ 292 (1962) and *In re*



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*Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). The examiner will not speculate as to the intended meaning.

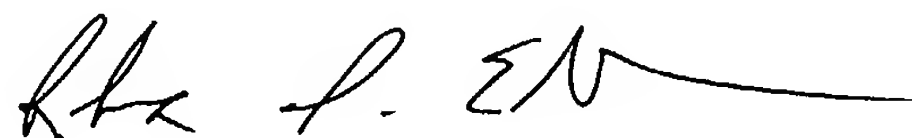
***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reba I. Elmore, whose telephone number is (703) 305-9706. The examiner can normally be reached on M-TH from 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor for AU 2187, Donald Sparks, can be reached for general questions concerning this application at (703) 308-1756. Additionally, the official fax phone number for the art unit is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703) 305-3800/4700.



Reba I. Elmore  
Primary Patent Examiner  
Art Unit 2187

September 5, 2004